

Page 15:

Line 35, replace "recv." with --received--.

Page 16:

Line 15, delete "in accordance with patent claim 16 (without figure)".

Line 28, replace "patent claim 18" with --the present invention,--.

In the Claims

Sub
B1
3
30673-030704
A1
1. (Amended) Method for a fast performance of network operations via a network having high delay times by means of a module for processing a system call of an application layer and for initiating network operations of a network layer, with the following steps:

- [-]transmission of the system call to the module,
- [-]determination of an execution mode of the system call by differentiating between a blocking and a non-blocking execution mode, and
- [-]direct return of a logical value to the application layer and initiation of a network operation in the case of a non-blocking performance mode.

4. (Amended) Method according to [any of claims 1 to] claim 3, wherein a processing of the received result of an operation is realized in the module.

5. (Amended) Method according to [any of claims 1 to 4] claim 1, wherein, upon the initiation of the network operation a non-blocking system call is converted into a state, in which an actual result of the system call executed in a partner instance is awaited without blocking the execution of the calling application.

6. (Amended) Method according to [any of claims 3, 4 or 5] claim 3, wherein the received results refer to a non-blocking state and have a logical value, or are a result of a blocking system call executed in the partner instance.

7. (Amended) Method according to [any of claims 3 to 6] claim 3, wherein the received results with a non-blocking execution mode are buffered.

8. (Amended) Method according to [any of claims 1 to 7] claim 1, wherein the logical values either have a logical positive or a logical negative propositional value.

10. (Amended) Method according to [any of claims 3 to 9] claim 3, wherein, with a non-blocking system call, in the case of non-pending negative results of previous calls [always] a logical positive value is returned to the application.

11. (Amended) Method according to [any of claims 1 to 10] claim 1, wherein the last system call of a connection is set into a blocking state in order to guarantee a return report of the results of the previously performed operations.

12. (Amended) Method according to claim 1, wherein [the] blocking system calls are realized [in a known manner] by waiting for the result of the system call executed in the partner instance.

13. (Amended) Method according to [one of claims 1 to 12] claim 1, wherein the system calls are socket system calls.

16. (Amended) Device for a fast performance of network operations via a network having high delay times by means of a module for processing system calls of an application layer and for initiating network operations of a network layer, with

- [-]a determining element for determining the execution mode of a system call,
- [-]converting means for converting the system call into network operations,
- [-]a sender for sending network operations,
- [-]a receiver for receiving results of the [performed] network operations,
- [-]a memory for storing received results, and
- [-]a processing element for processing the received results.

17. (Amended) Device according to claim 16 [with] further comprising elements for realizing a state, in which the result of the system call executed in a partner instance is awaited once the network operation is initiated, without blocking the execution of the calling application.

18. (Amended) Device according to claim 16 [or 17], wherein the means for processing the received results differentiates between negative and positive values.

In the Abstract

[The invention relates to a method] Method and a device are disclosed for a fast performance of network operations via a network with high delay times by means of a module for processing system calls of an application layer and for initiating network operations of a network layer. In [said] the module a differentiation between a blocking and non-blocking implementation mode is made. A non-blocking execution mode means that the considered system call returns a logical value as a result to the application, which signals whether the system call was successfully executed. In this case it is provided by the [invention] method and device to directly send a logical value to the application when a non-blocking system call is called, without having waited for the actual result of the operation executed in the communicating partner instance and corresponding to the system